

EASTERN UNIVERSITY, SRI LANKA
SECOND EXAMINATION IN SCIENCE 2002/2003 (March 2004)
SECOND SEMESTER
ZL 203 GENETICS AND DEVELOPMENTAL BIOLOGY

Time: 02 hours

Answer **all** questions.

(Illustrate your answers with clear labelled diagrams where necessary)

1. Write brief notes on any **two** of the following.

- a. Oncogenes
- b. Maternal inheritance
- c. Southern blotting
- d. Gene mapping of non human chromosomes.



2. Describe in detail gene regulation in prokaryotes with a known example.

3. Comment briefly on any **two** of the following.

- a. Role of hormones in insect development
- b. Neural degeneration in ageing
- c. Down's syndrome in males
- d. Role of oestrogen hormone in human females

4. a. What is cleavage?

b. Describe in detail with examples, the processes, changes during cleavage, types of cleavage and pattern of cleavage.

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